REMARKS

Claims 1-22 are pending in this application, of which claims 1, 4, 11, 15 and 22 are independent. All the claims have been rejected under 35 U.S.C. §103(a) as being unpatentable over Shpiro et al. in view of Bruckert.

In the statement of the rejection of independent claims 1, 4, 15 and 22, the Examiner admitted that Shpiro et al. does not teach that the word separation means includes an array of phonemes and word boundaries of the sentence, as claimed. However, the Examiner cited Bruckert and asserted that the reference teaches the missing feature of Shpiro et al. The Examiner, then, concluded that it would have been obvious to modify Shpiro's device to include an array of phonemes and word boundaries of the sentence based on the teachings of Bruckert to arrive at the claimed invention. This rejection is respectfully traversed.

Applicants submit that the Examiner has not established a *prima facie* basis to deny patentability to the claimed invention under 35 U.S.C. §103 for lack of the requisite factual basis. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Applicants emphasize that Bruckert does not teach what the Examiner mentioned in the Office Action, and thus, the applied combination of Shpiro et al. and Bruckert does not teach the claimed invention.

The Examiner asserted that Bruckert teaches a word separation means to "separate said sentence speech information into word speech information on the basis of each word included in said sentence <u>using model phoneme array information including an array of phonemes and word boundaries of the sentence...</u>, in order to produce a desired synthetic spoken pattern" (the last paragraph on page 4 of the Office Action) (emphasis added).

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In response, Applicants submit that Bruckert does not teach, among other things, the separation means to separate the sentence speech information into word speech information. The Examiner cited column 10, lines 57-63 from Bruckert, but that portion merely states, "the phonemes are simply divided into two classes..." (emphasis added). In contrast, the claimed invention is configured to separate sentence speech information into word speech information. The sentence speech information corresponds to "speech produced successively by a learner when the learner utters a sentence including a plurality of words" (see, e.g., claim 1). Accordingly, separation of phonemes in Bruckert is different from separation of the sentence speech information in the claims.

Applicants understand that the Examiner identified the claimed array of phonemes and word boundaries of the sentence as <u>phoneme array 402</u> of Fig. 4A in Bruckert. However, phoneme array 402 is not used to separate data into individual words. Bruckert describes, "At block 202, process 200 parses the data into individual words to be spoken" (column 4, lines 16-18). However, Bruckert is silent on what is used to separate data into individual words.

Bruckert further states, "At block 304 each word is <u>translated into</u> a phoneme array 402 as shown in Fig. 4A" (column 4, lines 41-42) (emphasis added). The reference defines phoneme array 402 as follows: "Phoneme array 402 has entries which correspond to phonemes of the language being synthesized, and also has entries giving boundaries of syllables, and entries giving boundaries of words which are being synthetically spoken" (column 4, lines 60-63) (emphasis added). Therefore, it is apparent that Bruckert does not teach using phoneme array 402 of Fig. 4A to separate data into individual words, but teaches generating phoneme array 402 based on the individual words.

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Accordingly, the applied combination of Shpiro et al. and Bruckert does not tech what is claimed in independent claims 1, 4, 15 and 22 reciting, among other things, separating "said sentence speech information into word speech information on the basis of each word included in said sentence using model phoneme array information including an array of phonemes and word boundaries of the sentence."

The Examiner separately discussed independent claim 11 reciting a foreign language device. Applicants submit that the above arguments are also applicable to claim 11. The applied combination does not teach, among other things, the word separation means for separating the sentence speech information into word speech information on the basis of the model phoneme array information including the array of phonemes and word boundaries of the sentence.

In addition, dependent claims 2, 3, 5-10, 12-14 and 16-21 are also patentably distinguishable over Shpiro et al. and Bruckert at least because they respectively include all the limitations recited in independent claims 1, 4, 11 and 15.

Thus, consideration of the teachings of Shpiro et al. and Bruckert, either individually or in combination, do not teach each and every limitation of claims 1-22. In the instant case, the pending rejection has not established *prima facie* obviousness of the claimed invention as recited in claims 1-22, because the proposed combination fails to teach all the claim limitations within the meaning of 35 U.S.C. §103. Applicants, therefore, respectfully solicit withdrawal of the rejection of claims 1-22 under 35 U.S.C. §103, and favorable consideration thereof.

It should, therefore, be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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